LARGE AREA POSITION/PROXIMITY CORRECTION DEVICE WITH ALARMS USING (D)GPS TECHNOLOGY

ABSTRACT OF THE DISCLOSURE

A collar to be worn on an object or a large or small animal has been designed incorporating (D)GPS technology. The operation of the device includes programming the three dimensional boundary into the memory of the device and simply installing the collar on the animal. As the animal approaches the preprogrammed boundary, a first alarm sounds when the subject is within an arbitrary user defined distance, and a second more drastic alarm such as a shock correction is applied when the subject approaches a second position closer to the boundary. Means to easily program the device are also included in the system. The device has the capability to call or transmit important information such as location, speed, identity, and medical parameters etc to a station automatically or when polled. All necessary analog and digital circuitry, microprocessor, programming, communications hardware are integrated into the collar. The device also has applications in land, air and sea navigation, farming, construction, tracking stolen vehicles, and keeping track of children. This device could also be embedded in a specialized lawnmower that would know where your yard ended and your neighbor's began, and traverse around all obstacles in the yard. Important Military applications would include warning and directing soldiers of front line boundaries, minefield mapping and 3-D direction around MOA's for aircraft.